LINDSKOG et al.
Serial No. 09/757,084

Atty Dkt: 4015-2
Art Unit: 2682

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 5, line 26, and continuing to page 6, line 9, as follows:

Various problems can arise in H2 operations depending on the periodicity of the measurements ~~requires~~ required from the mobile terminals (MTs), as is illustrated in two distinct cases described below. A first such case focuses on a problem for the mobile terminal (MT). As is readily understood, it is highly desirable for the mobile terminal (MT) to minimize power consumption during either an active mode or a sleep mode. In the sleep mode, the active/inactive duty cycle is very low, in the range of 1/1000 for sleep duration of ten frames. The duty cycle depends on the periodicity by which the mobile terminal (MT) monitors the BCCH. Depending on the measurement requirement dictated by the Access Point (AP), the signal strength measurements on adjacent frequencies very easily will add up to the magnitude of 1/1000. In other words, if constant measurements of adjacent frequencies are required in the sleep mode, battery consumption will become a problem. Or, since battery consumption is a non-negotiable parameter, the measurements must be infrequent to avoid high battery consumption, but on the other hand, the greater risk is to loose any vital information.

Please amend the captioned appearing at page 9, line 16 as follows:

BRIEF SUMMARY ~~OF THE INVENTION~~

Please amend the paragraph beginning at page 10, line 1, and continuing to page 10, line 7, as follows:

In another aspect, the mobile terminal ~~which~~ transmits to the power status repository certain measurement capability information. The measurement capability information has an indication of whether the mobile terminal has a capacity to perform radio frequency measurements. For example, the measurement capability information can indicates one of low power of the mobile terminal or a power restriction on the mobile terminal. As another example, the measurement capability information can indicate a particular sleep mode of the mobile terminal.

Please amend the paragraph beginning at page 14, line 12, and continuing to page 14, line 24, as follows:

Fig. 8A shows the power status information being transmitted over air interface AI from the mobile terminal (MT) to the Power Status Repository (PSR) in a separate or dedicated power status message 3-1A. While the Power Status Repository (PSR) of Fig. 8A is represented as being an Access Point (AP), it should be understood that the Power Status Repository (PSR) of Fig. 8 (and Fig. 8A subsequently described) could instead be another mobile terminal in the case of an ad hoc local area network. Further, Fig. 8A shows various events/situations in which the power status information can be sent from the mobile terminal (MT) 30 to Power Status Repository (PSR) 22. Example of such situations, illustrated in Fig. 8A, include situation 8-1 [upon power-up of mobile terminal (MT) 30]; situation 8-2 [upon command (e.g., from the Power Status Repository (PSR))]; situation 8-3 [upon LAN connection establishment]; situation 8-4 [upon changes in power status, e.g., line power removed by the user]; or situation 8-5 [spontaneous transmission from mobile terminal (MT)].

LINDSKOG et al.
Serial No. 09/757,084

Atty Dkt: 4015-2
Art Unit: 2682

Please amend the paragraph beginning at page 15, line 18, and continuing to page 16, line 2, as follows:

As explained below in connection, e.g., with Fig. 4, in another of its aspects the Power Status Repository (PSR) 22 of the present invention uses ~~in~~ the information provided in the power status message 3-1 (especially information indicating whether the mobile terminal (MT) 30 is currently being powered by battery power or line power) in executing a measurement routine. The measurement routine determines how often the mobile terminal (MT) 30 is to conduct measurements of received signal strength on the various frequencies for which the Power Status Repository (PSR) commands measurements. As explained previously, the purpose of such measurements is to facilitate selection by the Dynamic Frequency Selection (DFS) algorithm of a best frequency for use between the Access Point (AP) and the mobile terminal (MT) in the case of a Fig. 1A type of network, and between the mobile terminal (MT) and other mobile terminals in the case of a Fig. 1B ad hoc type of network. Fig. 3 further illustrates the Power Status Repository (PSR) sending a measurement command 3-2 to mobile terminal (MT) 30 in accordance with performance of its measurement routine. Pursuant to the measurement command 3-2, the mobile terminal (MT) 30 returns a measurement message 3-3.